

## CLAIMS

What is claimed is:

1. A method for enabling market-based pricing of a financial instrument, comprising  
5 the steps of:
  - (a) a debtor selling to a creditor an instrument evidencing borrowing of a principal;
  - (b) the creditor selling to the debtor a call option to repay the principal, or a  
10 portion thereof, early relative to an original maturity time of the instrument;
  - (c) the debtor selling to the creditor a rate put option (RPO);
  - (d) the debtor receiving the value of the RPO as well as a right, if market-interest rates have changed and the debtor's call option has been exercised, to have the principal adjusted to reflect an absorption by the debtor of new  
15 market-interest rates;
  - (e) the debtor paying an initial stated level of interest to the creditor;
  - (f) the creditor giving the debtor the option to retire any amount of the principal at any time;
  - (g) the debtor selling to the creditor a right to cause the debtor to pay, in the  
20 future, a different interest rate from an interest rate payable at a time of inception of the instrument; and
  - (h) if the creditor exercises the right to cause the debtor to pay the different interest rate, the debtor receiving an adjustment to the principal.
- 25 2. The method of claim 1, wherein the instrument evidencing borrowing is a mortgage.
3. The method of claim 2, wherein the mortgage is a residential mortgage.
- 30 4. The method of claim 2, wherein the mortgage is a commercial real estate mortgage.

5. The method of claim 3, wherein the residential mortgage is for a house.

6. The method of claim 3, wherein the residential mortgage is for a condominium.

7. The method of claim 3, wherein the residential mortgage is for a cooperative unit.

8. The method of claim 3, wherein the residential mortgage is for a government-sponsored enterprise.

9. The method of claim 8, wherein the government is a federal government.

10. The method of claim 8, wherein the government is a state government.

11. The method of claim 8, wherein the government is a municipal government.

12. The method of claim 8, wherein the government is a foreign sovereign entity.

13. The method of claim 8, wherein the government-sponsored enterprise is a supranational agency.

14. The method of claim 4, wherein the commercial real estate mortgage is for a government-sponsored enterprise.

15. The method of claim 14, wherein the government is a federal government.

16. The method of claim 14, wherein the government is a state government.

17. The method of claim 14, wherein the government is a municipal government.

18. The method of claim 14, wherein the government is a foreign sovereign entity.

19. The method of claim 14, wherein the government-sponsored enterprise is a supranational agency.

5 20. The method of claim 4, wherein the commercial real estate mortgage is for a mixed-use loan.

21. The method of claim 4, wherein the commercial real estate mortgage is for a subset of an educational institutional offering.

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22. The method of claim 4, wherein the commercial real estate mortgage is for a land trust for conservation purposes.

23. The method of claim 4, wherein the commercial real estate mortgage is for a land  
15 trust for public purposes.

24. The method of claim 4, wherein the commercial real estate mortgage is for a religious financial structure.

20 25. The method of claim 4, wherein the commercial real estate mortgage is for a personal equity line of credit.

26. The method of claim 4, wherein the commercial real estate mortgage is for an education loan.

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27. The method of claim 1, wherein the instrument evidencing the borrowing is an automobile loan.

28. The method of claim 1, wherein the instrument evidencing the borrowing is an  
30 equipment loan.

29. The method of claim 1, wherein the instrument evidencing the borrowing is an equipment trust certificate loan.

30. The method of claim 1, wherein the instrument evidencing the borrowing is an obligation arising out of a restructuring.

31. The method of claim 20, wherein the instrument evidencing the borrowing is an obligation arising out of a change of corporate control.

32. The method of claim 20, wherein the instrument evidencing the borrowing is a loan is for a shipping entity.

33. The method of claim 25, wherein the shipping entity is a navel vessel.

34. The method of claim 25, wherein the shipping entity is an aircraft.

35. The method of claim 25, wherein the shipping entity is a spacecraft.

36. The method of claim 25, wherein the shipping entity is a car.

37. The method of claim 25, wherein the shipping entity is a truck.

38. The method of claim 25, wherein the shipping entity is a train.

39. The method of claim 1, wherein the instrument evidencing the borrowing is a loan for an Internet entity.

40. The method of claim 1, wherein the instrument evidencing the borrowing is a general purpose corporate loan.

41. The method of claim 1, wherein the instrument evidencing the borrowing is a collateralized loan obligation.

42. The method of claim 1, wherein the instrument evidencing the borrowing is a collateralized bond obligation.

43. The method of claim 1, wherein the instrument evidencing the borrowing is a military equipment loan.

44. The method of claim 1, wherein the instrument evidencing the borrowing is a consumer financing for durable goods.

45. The method of claim 1, wherein the instrument evidencing the borrowing is a lease.

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46. The method of claim 45, wherein the lease is leveraged.

47. The method of claim 1, wherein the value of the put is a one-time payment.

48. The method of claim 1, wherein the value of the put is an annuitized change to the debtor's borrowing rate.

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49. The method of claim 1, wherein in step (c) the debtor further sells to the creditor the entire forward curve.

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50. A method for structuring an interest-bearing instrument in a subject market, the instrument having a debtor, a creditor, a sensitivity to parameter changes, an extension risk, a credit risk, and an underlying obligation having a principal size, an interest rate, and a payment timing, comprising the steps of:

- (a) providing that the instrument's sensitivity to parameter changes allow a debtor and a creditor to agree upon any possible combination or permutation of principal and interest to be paid, and the timing thereof;
- (b) providing that the instrument's extension risk and credit risk be completely subject to the creditor's and debtor's control through a calculation of an agreement upon interest rates; and
- (c) providing that any options in the subject market may be made explicit, may be priced, and may be used to control the principal size, interest rate, and payment timing of the underlying obligation.

51. The method of claim 1, wherein pricing and capturing the value of a financial entities' regulatory capital savings is done using the following equation:

$$RCS_t = \left( \sum_{i=1}^{i=T} (((L_{ua} - L_R)_i * RCW * RCP * R_k / F) * (1 + \bar{R}_{f_i} / F)^{-i} / L_{ua_i}) \right) * 10000$$

where:

15 RCS is Risk Capital Savings;

$L_{ua}$  is Unamortized Loan Balance: Monthly;

$L_R$  is Loan: RAM variant (contains rate put option);

RCW is Risk Capital Weight;

RCP is Risk Capital Percentage;

20  $R_k$  is Contract Rate Discount Factor;

$\bar{R}_{f_i}$  is Strike Rate Discount Factor; and

F is Periodicity.

52. The method of claim 50, wherein pricing and capturing the value of a financial entities' regulatory capital savings is done using the following equation:

$$RCS_t = \left( \sum_{i=1}^{i=T} (((L_{ua} - L_R)_i * RCW * RCP * R_k / F) * (1 + \bar{R}_{f_i} / F)^{-i} / L_{ua_i}) \right) * 10000$$

where:

RCS is Risk Capital Savings;

$L_{ua}$  is Unamortized Loan Balance: Monthly;

$L_R$  Loan: RAM variant (contains rate put option);

RCW is Risk Capital Weight;

RCP Risk Capital Percentage;

5  $R_k$  is Contract Rate Discount Factor;

$\bar{R}_f$  is Strike Rate Discount Factor; and

F is Periodicity.

53. A computer-based system for structuring an interest-bearing instrument,
- 10 comprising:
- (a) means for adding to a borrowing a rate put option on an interest rate of the borrowing; and
  - (b) means for permitting correlative adjustments to an outstanding loan principal of the borrowing.

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